Nahdir Austin

Honors Physics

Period 2

Assignment 7

Safe Harbor Water Power Corporation

The Safe harbor Water Power Corporation (Safe Harbor Hydroelectric Station) was created almost 80 years ago by two stockholders. Today it is jointly owned by Constellation Power Source Generation, Inc. and PPL Holtwood LLC. It utilizes the Susquehanna River in order to produce hydroelectricity—a clean source of energy. Located in Conestoga, Pennsylvania, it provides electricity to hundreds of thousands of homes, thus making it a very important Pennsylvanian power plant.

The Safe Harbor Hydroelectric Station was constructed in 1930. The original cost of the project was approximately $34 million. It took about 20 months, including the construction time, to generate electricity. The electricity was generated by seven generating units, whose capacity was 230 megawatts. In 1985-86, 5 more generating units were added for about $125 million, increasing the total capacity to about 417 megawatts.

In a given day Safe Harbor power plant generates about 10 million kilowatt hours (kWh) of electrical energy. The average amount of electricity produced in a year is about 1,088,950,400 kWh—total is dependent on the river flow. The river flow is usually about 2000 cfs. Safe harbor’s total output is used to supplement the energy flow into the Pennsylvania-New jersey- Maryland Interconnection (PJM). This energy is usually used to meet peak demands for electricity. This plants has a maximum water handling capacity is 110,000 cfs.

Safe harbor is used for more than just producing electricity. They have many recreational facilities available to the general public. It utilizes Lake Clarke, in an effort to providing activities. Some of the recreational activities include boating, picnicking, water skiing, fishing, and some simple fun in the sun!

References: <http://www.shwpc.com/about.html>